

IN THE CLAIMS

1. (Currently amended) A process for preparing a catalyst for partial oxidation of propylene and iso-butylene represented by the following Chemical Formula 1, which process comprises the steps of:

a) dissolving a metal salt compound comprising

i) a molybdenum salt,

ii) a bismuth salt,

iii) an iron salt,

iv) one or more kinds of salts of metals selected from the group consisting of cobalt, tungsten, vanadium, antimony, and nickel, and

v) one or more kinds of salts of metals selected from the group consisting of potassium, rubidium, and cesium,

in a nitric acid aqueous solution or in an organic acid solution to prepare a catalyst suspension;

b) drying the catalyst suspension of step a) in a microwave oven;

c) pulverizing and molding the dried catalyst of step b) to prepare a catalyst powder; and

d) calcining the catalyst powder obtained in step c)

[Chemical Formula 1]

$Mo_aBi_bFe_cX_dY_eO_f$

(wherein X is cobalt, tungsten, vanadium, antimony, or nickel,

Y is potassium, rubidium, or cesium,

each of a, b, c, d, and e represents the atomic mole ratio of each metal, and when a is 12, b is 0.5~2, c is 0.5~2, d is 3~8, and e is 0.005~0.2,
and f is determined according to oxidation state of each metal) . }

2. (Currently amended) The process for preparing a catalyst for partial oxidation of propylene and iso-butylene according to Claim 1, wherein the drying step b) comprises drying the solution in a microwave oven with a wavelength of 600 MHz to 2.5GHz.

3. (Original) The process for preparing a catalyst for partial oxidation of propylene and iso-butylene according to Claim 1, wherein the drying of step b) is carried out for 30 seconds to 5 minutes, for 10 mL of the catalyst suspension.

4. (Original) The process for preparing a catalyst for partial oxidation of propylene and iso-butylene according to Claim 1, wherein the catalyst has a surface area of 10 to 20 m²/g.

5. (Currently amended) A catalyst for partial oxidation of propylene and iso-butylene represented by the following Chemical Formula 1, which is prepared by the process of Claim 1:

[Chemical Formula 1]

Mo_aBi_bFe_cX_dY_eO_f

(wherein X is cobalt, tungsten, vanadium, antimony, or nickel;
Y is potassium, rubidium, or cesium;

each of a, b, c, d, and e represents the atomic mole ratio of each metal, and when a is 12, b is 0.5~2, c is 0.5~2, d is 3~8, and e is 0.005~0.2; and f is determined according to the oxidation state of each metal -),
wherein the catalyst has a surface area of 10 to 20 m²/g.